

## ABSTRACT

An ultrasonic levitation device, comprising a fixed part and a movable part movably installed on the fixed part, wherein thin ultrasonic  
5 vibrators are installed on the fixed part or the movable part and, for  
example, floating surfaces are formed, in sloped surfaces, stacking  
piezoelectric elements are installed on the fixed part or the movable part,  
plate oscillating devices are installed on the fixed part or the movable part  
10 through pillar members, or the direction of ultrasonic vibration of the fixed  
part or the movable part is changed by a vibrating direction changing means,  
whereby the movable part can be floated through the floating surfaces by  
ultrasonic vibration of the fixed part or the movable part.